

What is claimed as new and what is desired to secure by Letters Patent of the United States is:

1. A game for learning binary mathematics and comprising:
 - a plurality of balls;
 - a backboard having a substantially planar surface and opposed top and bottom edge portions integral therewith;
 - a plurality of elongate members selectively connected to each other and to said backboard, said plurality of members being disposed in non-horizontal directions and defining a plurality of paths between said top and bottom edge portions; and
 - a plurality of gate sections pivotally connected to said backboard and engageable with select ones of said plurality of members so that said gate sections can be pivoted between open and closed positions respectively;
 - select ones of said plurality of marbles causing corresponding ones of said plurality of gate sections to pivot between open and closed positions after passing thereby, corresponding 0 and 1 binary values being assigned to closed and open ones of said plurality of gate sections respectively so that a number of said plurality of marbles that have been introduced to said game can be determined by adding the corresponding 0 and 1 binary values.
2. The game of claim 1, further comprising:
 - a plurality of electrical contacts connected to said plurality of gate sections and said plurality of elongate members;
 - a plurality of LEDs connected to one said plurality of electrical contacts respectively; and
 - a power supply source connected to another said plurality of electrical contacts respectively;
 - said plurality of electrical contacts being caused to engage each other when said plurality of gate sections are at closed positions and thereby cause said plurality of LEDs to illuminate respectively.

3. The game of claim 1, wherein said plurality of gate sections each have an axis of rotation extending substantially perpendicularly to said backboard respectively.

4. The game of claim 1, wherein said plurality of gate sections each include a top surface that becomes substantially aligned with a corresponding one of said plurality of elongate members when said plurality of gate sections are moved to a closed position so that said plurality of balls can pass thereover respectively.

5. The game of claim 1, wherein said plurality of balls are formed from one of glass and steel materials.

6. A game for learning binary mathematics and comprising:

- a plurality of balls;
- a backboard having a substantially planar surface and opposed top and bottom edge portions integral therewith;
- a plurality of elongate members selectively connected to each other and to said backboard, said plurality of members being disposed in non-horizontal directions and defining a plurality of paths between said top and bottom edge portions;
- a plurality of gate sections pivotally connected to said backboard and engageable with select ones of said plurality of members so that said gate sections can be pivoted between open and closed positions respectively;
- a plurality of electrical contacts connected to said plurality of gate sections and said plurality of elongate members;
- a plurality of LEDs connected to one said plurality of electrical contacts respectively; and
- a power supply source connected to another said plurality of electrical contacts respectively;
- select ones of said plurality of marbles causing corresponding ones of said plurality of gate sections to pivot between open and closed positions after passing thereby, corresponding 0 and 1 binary values being assigned to closed and open ones of said plurality of gate sections respectively so that a number of said plurality of

marbles that have been introduced to said game can be determined by adding the corresponding 0 and 1 binary values; said plurality of electrical contacts being caused to engage each other when said plurality of gate sections are at closed positions and thereby cause said plurality of LEDs to illuminate respectively.

7. The game of claim 6, wherein said plurality of gate sections each have an axis of rotation extending substantially perpendicularly to said backboard respectively.

8. The game of claim 6, wherein said plurality of gate sections each include a top surface that becomes substantially aligned with a corresponding one of said plurality of elongate members when said plurality of gate sections are moved to a closed position so that said plurality of balls can pass thereover respectively.

9. The game of claim 6, wherein said plurality of balls are formed from one of glass and steel materials.

10. A game for learning binary mathematics and comprising:
a plurality of balls;
a backboard having a substantially planar surface and opposed top and bottom edge portions integral therewith;
a plurality of elongate members selectively connected to each other and to said backboard, said plurality of members being disposed in non-horizontal directions and defining a plurality of paths between said top and bottom edge portions;
a plurality of gate sections pivotally connected to said backboard and engageable with select ones of said plurality of members so that said gate sections can be pivoted between open and closed positions respectively, said plurality of gate sections each have an axis of rotation extending substantially perpendicularly to said backboard respectively;
a plurality of electrical contacts connected to said plurality of gate sections and said plurality of elongate members;

a plurality of LEDs connected to one said plurality of electrical contacts respectively; and

a power supply source connected to another said plurality of electrical contacts respectively;

select ones of said plurality of marbles causing corresponding ones of said plurality of gate sections to pivot between open and closed positions after passing thereby, corresponding 0 and 1 binary values being assigned to closed and open ones of said plurality of gate sections respectively so that a number of said plurality of marbles that have been introduced to said game can be determined by adding the corresponding 0 and 1 binary values; said plurality of electrical contacts being caused to engage each other when said plurality of gate sections are at closed positions and thereby cause said plurality of LEDs to illuminate respectively.

11. The game of claim 10, wherein said plurality of gate sections each include a top surface that becomes substantially aligned with a corresponding one of said plurality of elongate members when said plurality of gate sections are moved to a closed position so that said plurality of balls can pass thereover respectively.

12. The game of claim 10, wherein said plurality of balls are formed from one of glass and steel materials.